

Claims

[1] A hydraulic drive control device comprising a driving hydraulic circuit for driving a hydraulic actuator by supplying pressure oil to or draining it from the hydraulic actuator through a control valve, the pressure oil being discharged from a hydraulic pump driven by an engine and a quick return circuit for directly flowing a part of hydraulic oil discharged from the hydraulic actuator back to a tank, while the hydraulic actuator being driven, the hydraulic drive control device further comprising:

engine controlling means for controlling an output of the engine such that the output of the engine is restricted when the quick return circuit is opened.

[2] The hydraulic drive control device according to claim 1,

wherein back pressure detecting means for detecting a back pressure of the quick return circuit is provided and the engine controlling means adjusts an amount of restricting the output of the engine based on a value of the back pressure detected by the back pressure detecting means.

[3] The hydraulic drive control device according to claim 1 or 2,

wherein the hydraulic actuator is an arm cylinder for a hydraulic excavator and the quick return circuit is operated during dumping operation of an arm.

[4] A hydraulic drive control device comprising a plurality of hydraulic circuit sections for driving their associated hydraulic actuators by pressure oil discharged from their associated hydraulic pumps that use an engine as a driving source, the hydraulic drive control device being switchable between an interflow condition and a split-flow condition, the interflow condition being such that the hydraulic drive control device is driven with one of the plurality of hydraulic circuit sections being connected to another of the hydraulic circuit sections, the split-flow condition being such that the hydraulic drive control device is driven with the one of the plurality of the hydraulic circuit sections being separated from the another of the hydraulic circuit sections, the hydraulic drive control device further comprising:

engine controlling means for controlling an output of the engine such that the output of the engine is restricted while the hydraulic drive control device being switched from the interflow condition to the split-flow condition.

[5] The hydraulic drive control device according to claim 4,

wherein the switching between the interflow condition and the split-flow condition is done based on discharge pressures of the hydraulic pumps.

[6] The hydraulic drive control device according to claim 4 or 5,

wherein the hydraulic actuator corresponding to the one of the plurality of the hydraulic circuit sections is an arm cylinder for a hydraulic excavator and the hydraulic actuator corresponding to the another of the hydraulic circuit sections is a bucket cylinder for the hydraulic excavator; and

wherein the hydraulic drive control device is switched from the interflow condition to the split-flow condition when a discharge pressure of the hydraulic pump of the one of the plurality of the hydraulic circuit sections or the discharge pressure of the hydraulic pump of the another of the hydraulic circuit sections reaches a specified value during excavation performed by simultaneous operations of the arm cylinder and the bucket cylinder.